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10/67758

Form PTO-1449 (Modified)

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Use several sheets if necessary)

ACOUSTIC LOGGING APPARATUS AND METHOD

Atty. Docket No.
1391-26800

Serial No.

Applicant
Joakim O. Blanch, et al.

Filing Date
Herewith

Group



REFERENCE DESIGNATION U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
W	AA	Re 31,222	04/26/83	McCracken	364	571	12/23/77
	AB	4,367,541	01/04/83	Seeman	367	34	12/06/79
	AC	4,594,691	06/10/86	Kimball et al.	367	32	03/27/84
	AD	4,718,027	01/05/88	Richardson et al.	364	554	10/28/85
	AE	5,081,611	01/14/92	Hornby	367	25	03/06/91
	AF	5,541,890	07/30/96	Tang	367	34	05/10/95
	AG	5,661,696	08/26/97	Kimball et al.	367	31	08/11/95
	AH	5,712,829	01/27/98	Tang et al.	367	75	08/14/96
	AK	5,740,124	04/14/98	Chunduru et al.	367	73	11/19/96
	AJ	5,960,369	09/28/99	Samaroo	702	6	10/23/97
	AK	6,012,015	01/04/00	Tubel	702	6	09/18/97
V	AL	6,061,633	05/09/00	Fukuhara et al.	702	6	01/31/97
	AM	6,088,294	07/11/00	Leggett, III et al.	367	25	01/24/97

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	Translation	
							YES	NO

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

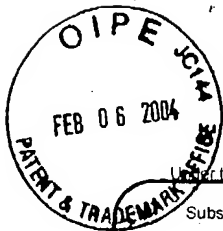
EXAMINER

NELSON MOSKOWITZ
PRIMARY EXAMINER

DATE CONSIDERED

11/03 + 4/04

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 3

Complete if Known

Application Number	10/025,528
Filing Date	December 18, 2001
First Named Inventor	Joakim O. Blanch
Art Unit	3663
Examiner Name	Nelson Moskowitz
Attorney Docket Number	1391-26800

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
✓		US- 6,449,560	09-10-2002	Kimball	
		US-			
		US-			
		US-			
		US-			
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FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ Number ⁴ Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶

Examiner Signature	NELSON MOSKOWITZ	Date Considered	4/10/04
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STATEMENT BY APPLICANT**

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Application Number	10/025,528 10/677578
Filing Date	December 18, 2001
First Named Inventor	Joakim O. Blanch
Art Unit	3663
Examiner Name	Nelson Moskowitz
Attorney Docket Number	1391-26800

NON PATENT LITERATURE DOCUMENTS

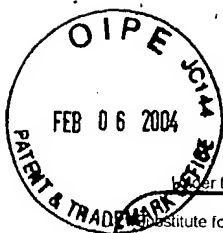
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
✓		Alan Brie et al., "New Directions in Sonic Logging"; Spring 1998, (pp. 40-55); Oilfield Review	
		Batakrishna Mandal, "Shear wave Anistrophy from Single Dipose Source" (undated)	
		Chung Chang et al.; "Localized Maps of the Subsurface," (pp. 56-66) Spring 1998; Oilfield Review	
		G. Brewton, "The Geology of the Skinner, Bartlesville and Miesner Sandstones in Well DM21A At Catoosa"; Amoco publication, Nov. 1996	
		B. A. Auld, "Acoustic Fields and Waves in Solids", Vol. I (pp. 68-423), A Wiley-Interscience Publication	
		K. Koster et al., "Dipole Shear Anistrophy Logging", Amoco Publication SL3.7 (pp. 1139-1142)	
		"Faults and Faulting", EAS-A193 Class Notes, SLU (9 pp.)	
		"Seismic Waves and Earth's Interior", EAS-A193 Class Notes, SLU (13 pp.)	
		Dr. Daniel A. Ruselle, "Sound Fields Radiated by Simple Sources", Kettering University (4 pp.)	
N		N. Cheng et al., "Borehole Geophysics I: Well Logging; Decomposition and particle motion of acoustic dipole log in anistrophic formation: Earth Resources Lab MIT	

Examiner Signature	NELSON MOSKOWITZ PRIMARY EXAMINER	Date Considered	4/04
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Complete if Known			
		Application Number	10/025,528 10/622398		
		Filing Date	December 18, 2001		
		First Named Inventor	Joakim O. Blanch		
		Art Unit	3663		
		Examiner Name	Nelson Moskowitz		
Sheet	3	of	3	Attorney Docket Number	1391-26800

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		J.O. Blanch et al., "A Method to Extract Fast and Slow Shear Wave Velocities in an Anisotropic Formation; SEG International Exposition and 72nd Annual Meeting, 10/11/02	
		P. Carrion et al., "Source wavelet and its angular spectrum from plane-wave seismograms", geophysics, Vol. 55, No. 8 (Aug. 1990), pp. 1026-2035	
		Chuen Hon Cheng et al., "Elastic wave propagation in a fluid-filled borehole and synthetic acoustic logs", Geophysics, Vol. 46, No. 7 (July 1981), pp. 1042-1053	
		L. Thomsen, "Reflection seismology over azimuthally anisotropic media", Geophysics, Vol. 53, No. 3 (March 1988), pp. 304-313	

Examiner Signature	NELSON MOSKOWITZ	Date Considered	4/04
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ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

Stylesheet Version v18.0

Title of Invention	Acoustic Logging Apparatus and Method						
<p>Application Number: 10/025528 *10/025528*</p> <p>Confirmation Number: 6433</p> <p>First Named Applicant: Joakim Blanch</p> <p>Attorney Docket Number: 139126800</p> <p>Art Unit: 3663</p> <p>Examiner: Nelson Moskowitz</p> <p>Search string: (4794572 or 4803666 or 4817061 or 4888743 or 4903244 or 4933913 or 5027332 or 5029146 or 5136554 or 5214613 or 6188961 or 6098021 or 6526354 or 4789969 or 4648039 or 4951267 or 5398215 or 4995008 or 5999486 or 5835452).pn.</p>							
US Patent Documents							
Note: Applicant is not required to submit a paper copy of cited US Patent Documents							
init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
<input checked="" type="checkbox"/>	1	4794572	1988-12-27	Sondergeld		367	31
<input type="checkbox"/>	2	4803666	1989-02-07	Alford			
<input type="checkbox"/>	3	4817061	1989-03-28	Alford et al.			
<input type="checkbox"/>	4	4888743	1989-12-19	Thomsen			
<input type="checkbox"/>	5	4903244	1990-02-20	Alford			
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<input type="checkbox"/>	7	5027332	1991-06-25	Alford			
<input type="checkbox"/>	8	5029146	1991-07-02	Alford			
<input type="checkbox"/>	9	5136554	1992-08-04	Thomsen et al.			
<input type="checkbox"/>	10	5214613	1993-05-25	Esmersoy			
<input type="checkbox"/>	11	6188961	1991-02-13	Mandal			

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<input checked="" type="checkbox"/>	12	6098021	2000-08-01	Tang et al.
<input type="checkbox"/>	13	6526354	2003-02-25	Bose et al.
<input type="checkbox"/>	14	4789969	2008-12-06	Naville
<input type="checkbox"/>	15	4648039	1987-03-03	Devaney et al.
<input type="checkbox"/>	16	4951267	1990-08-21	Chang et al.
<input type="checkbox"/>	17	5398215	1995-03-14	Sinha et al.
<input type="checkbox"/>	18	4995008	1991-02-19	Hornbostel et al.
<input type="checkbox"/>	19	5999486	1999-12-07	DeVault
<input checked="" type="checkbox"/>	20	5835452	1998-11-19	Mueller et al.

Signature

Examiner Name	Date
NELSON MOSKOWITZ	4/04

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Substitute for form 1449/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Application Number	10/027,749 10/677598
		Filing Date	12/21/2001
		First Named Inventor	Joakim O. BLANCH
		Art Unit	2862
		Examiner Name	Toan M. Le
Sheet Two	of Two	Attorney Docket Number	1391-27201

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		J.O. BLANCH, et al., A Method to Extract Fast and Slow Shear Wave Velocities in an Anisotropic Formation; SEG International Exposition and 72nd Annual Meeting, 10/11/02	
		PHILLIP M. CARRION, et al., Source Wavelet and its Angular Spectrum from Plane-Wave Seismograms; Geophysics, Vol. 55, No. 8, (August 1990); pp. 1026-2035	
		CHUEN HON CHENG, et al., Elastic Wave Propagation in a Fluid-Filled Borehole and Synthetic Acoustic Logs; Geophysics, Vol. 46, No. 7, (July 1981); pp. 1042-1053	

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